

ABSTRACT OF THE DISCLOSURE

High quality articles which are large or of complex shapes are difficult to mold from low density expandable thermoplastic polymers, such as LDPP (Low Density PolyPropylene) because their low heat capacity density causes premature cooling and setting as they try to reach extremities and narrow regions of an injection mold cavity. To overcome these problems the invention provides cycling, during article production, of heating and cooling in the regions of the mold that are near these extremities and narrow regions. The resulting system offers production of low material cost polymer articles in lower cost, lower pressure injection molds and machine systems.